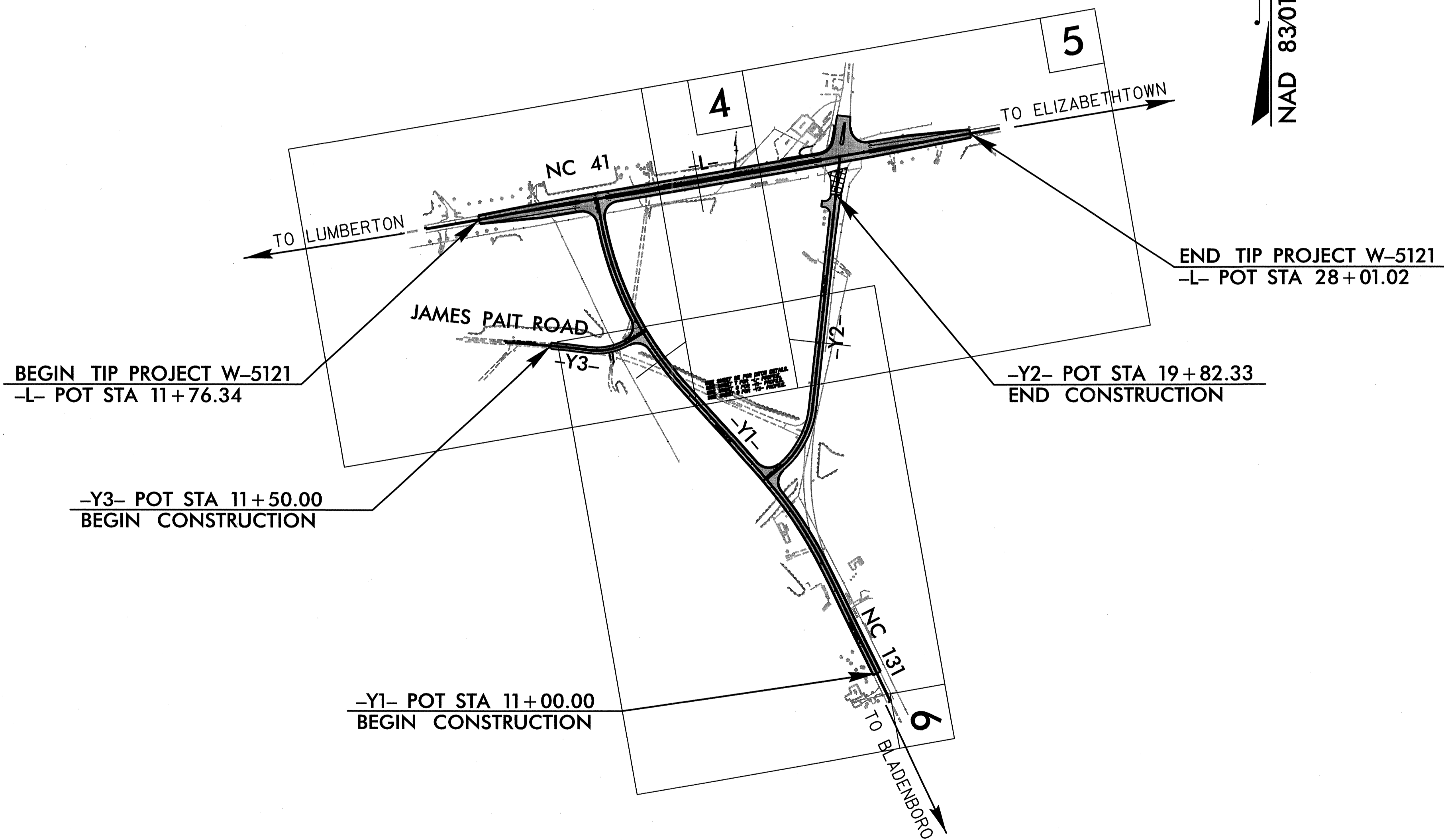


TIP PROJECT: W-5121

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
**PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5121	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

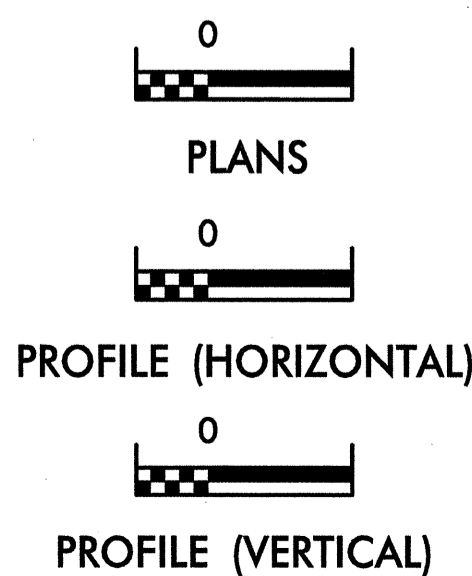


EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.05	Temporary Silt Ditch	---
1630.05	Temporary Diversion	→
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	△△△
1622.01	Temporary Berms and Slope Drains	T
1630.01	Silt Basin Type B	▨
1633.01	Temporary Rock Silt Check Type-A	⊗
1633.01	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	⊗
1633.01	Temporary Rock Silt Check Type-B	▶
1633.01	Wattle / Coir Fiber Wattle	⌋
1633.01	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	⌋
1634.01	Temporary Rock Sediment Dam Type-A	⊞
1634.02	Temporary Rock Sediment Dam Type-B	D
1635.01	Rock Pipe Inlet Sediment Trap Type-A	C
1635.02	Rock Pipe Inlet Sediment Trap Type-B	C
1630.04	Stilling Basin	▭
1630.06	Special Stilling Basin	▭
1632.01	Rock Inlet Sediment Trap: Type A	A
1632.02	Type B	B
1632.03	Type C	C
1630.01	Skimmer Basin	▭
1630.02	Tiered Skimmer Basin	▭
1630.03	Infiltration Basin	▭

CONTRACT:

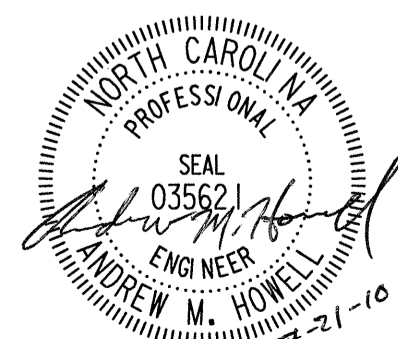
GRAPHIC SCALE



ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

WAZ ENGINEERING, PC
112 N. Main Street
Holly Springs, NC 27540
license no: C-2826

HYDRAULICS ENGINEER



SIGNATURE: _____

Reviewed and Approved by the Office of:
ROADSIDE ENVIRONMENTAL UNIT
1 South Wilmington St.
Raleigh, NC 27611
2006 STANDARD SPECIFICATIONS

Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

- 1605.01 Temporary Silt Fence
- 1607.01 Gravel Construction Entrance
- 1630.02 Silt Basin Type B
- 1630.06 Special Stilling Basin
- 1632.02 Rock Inlet Sediment Trap Type B
- 1635.01 Rock Pipe Inlet Sediment Trap Type A

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
W-5121	EC-2
EROSION CONTROL ENGINEER	

WATTLE WITH POLYACRYLAMIDE DETAIL

NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. CROSS SECTION.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

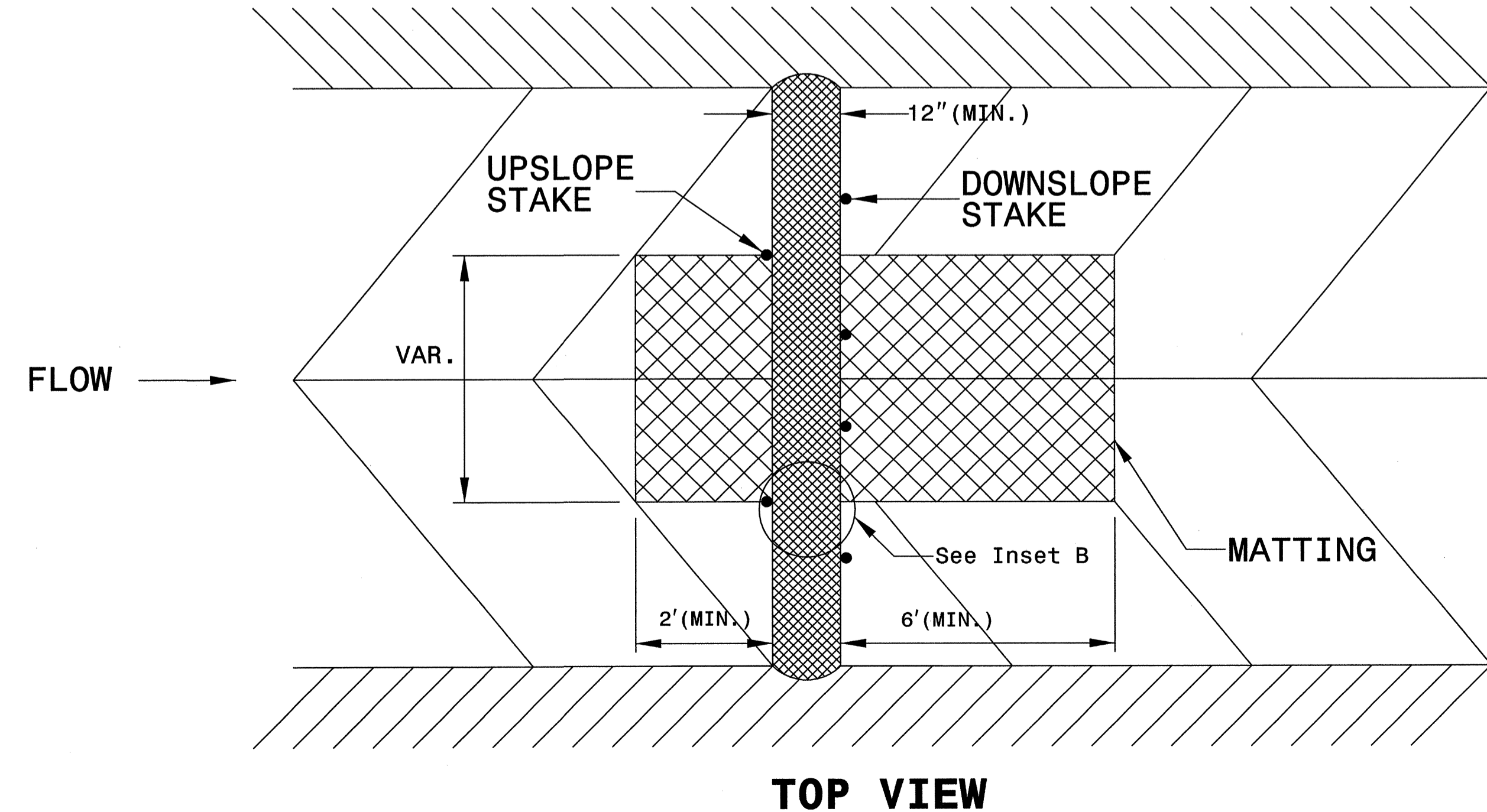
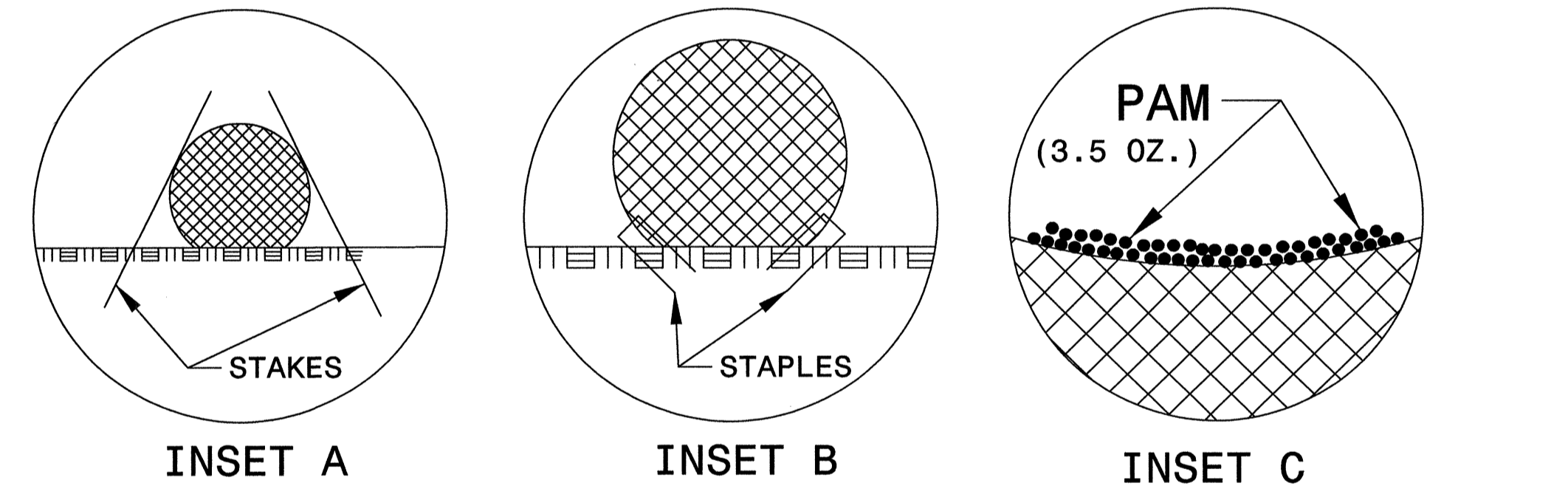
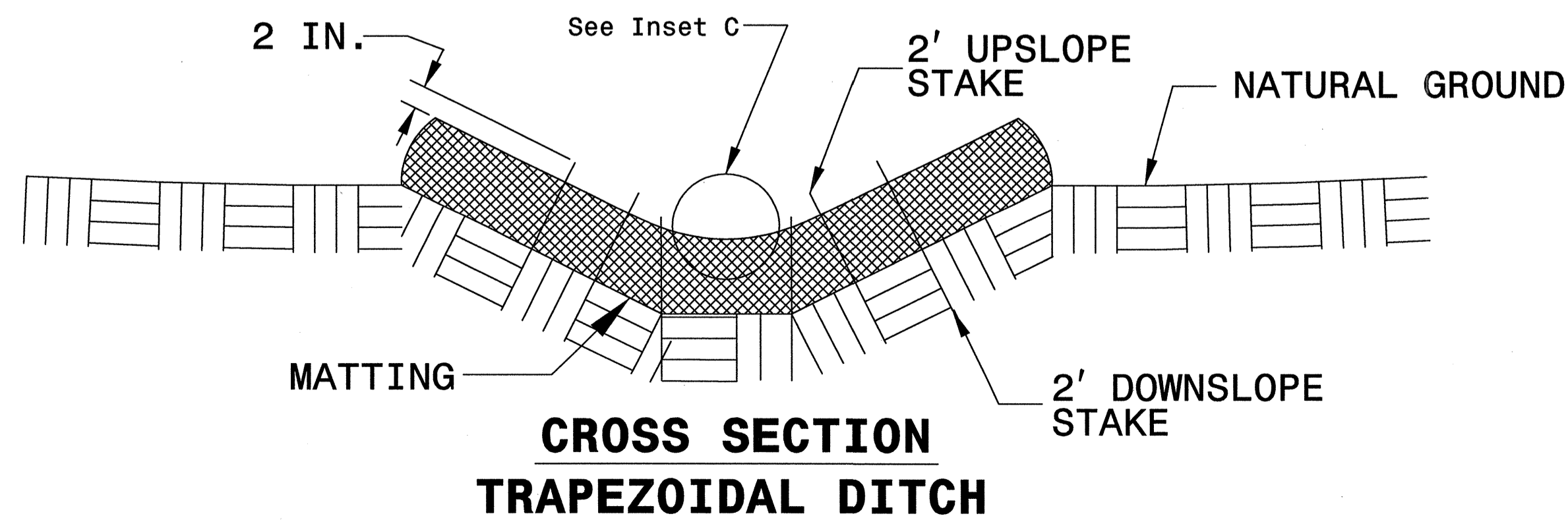
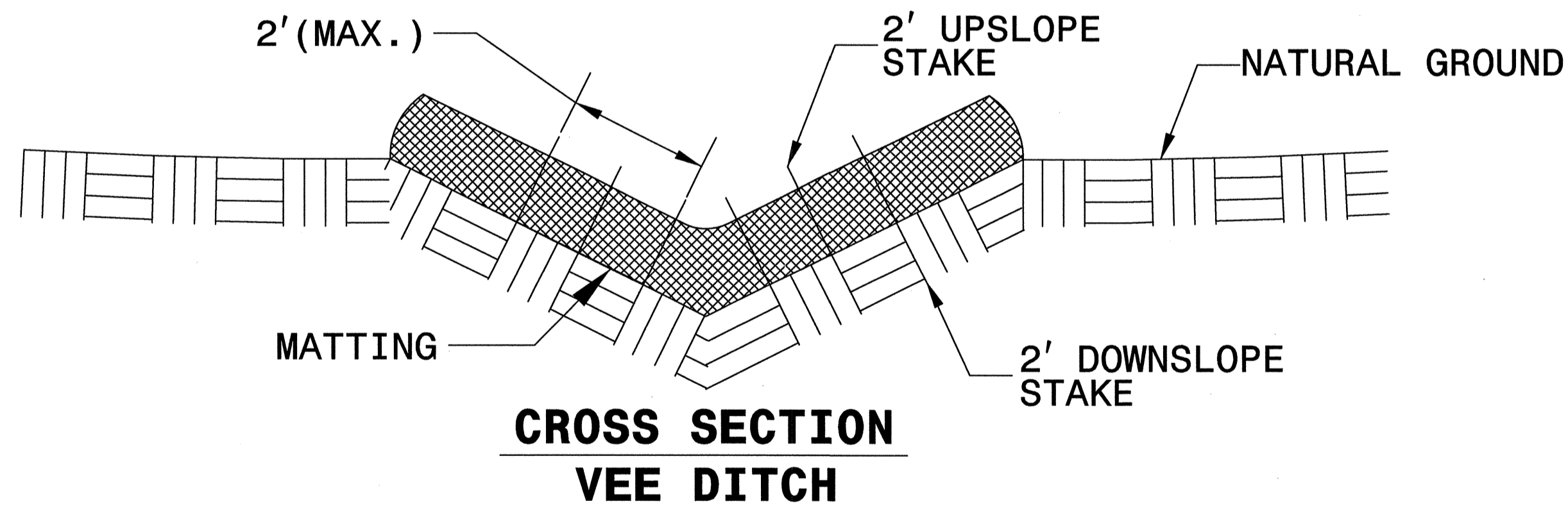
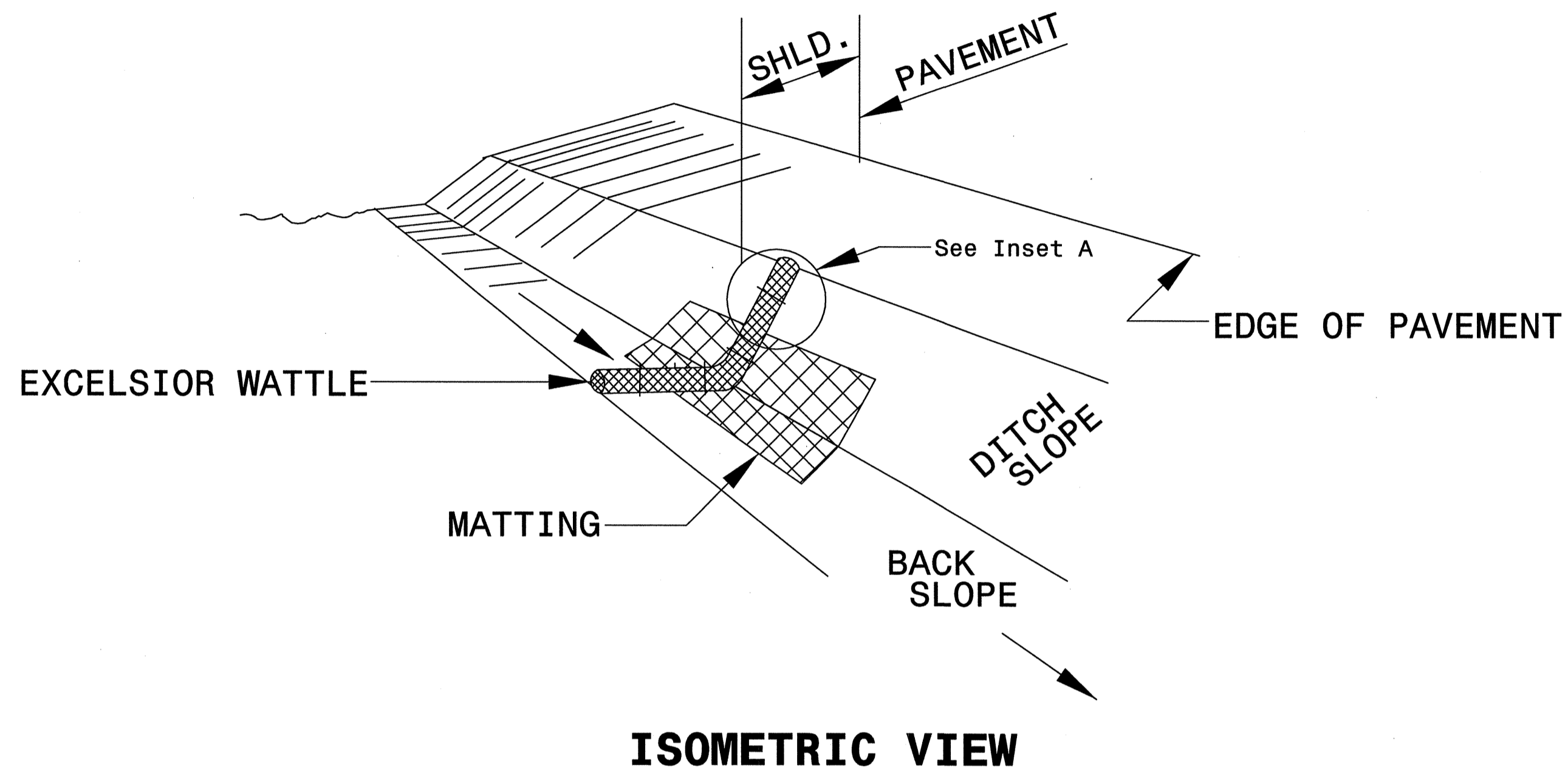
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 3.5 OUNCES OF ANIONIC OR NEUTRALLY CHARGED POLYACRYLAMIDE (PAM) OVER WATTLE WHERE WATER WILL FLOW AND AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.

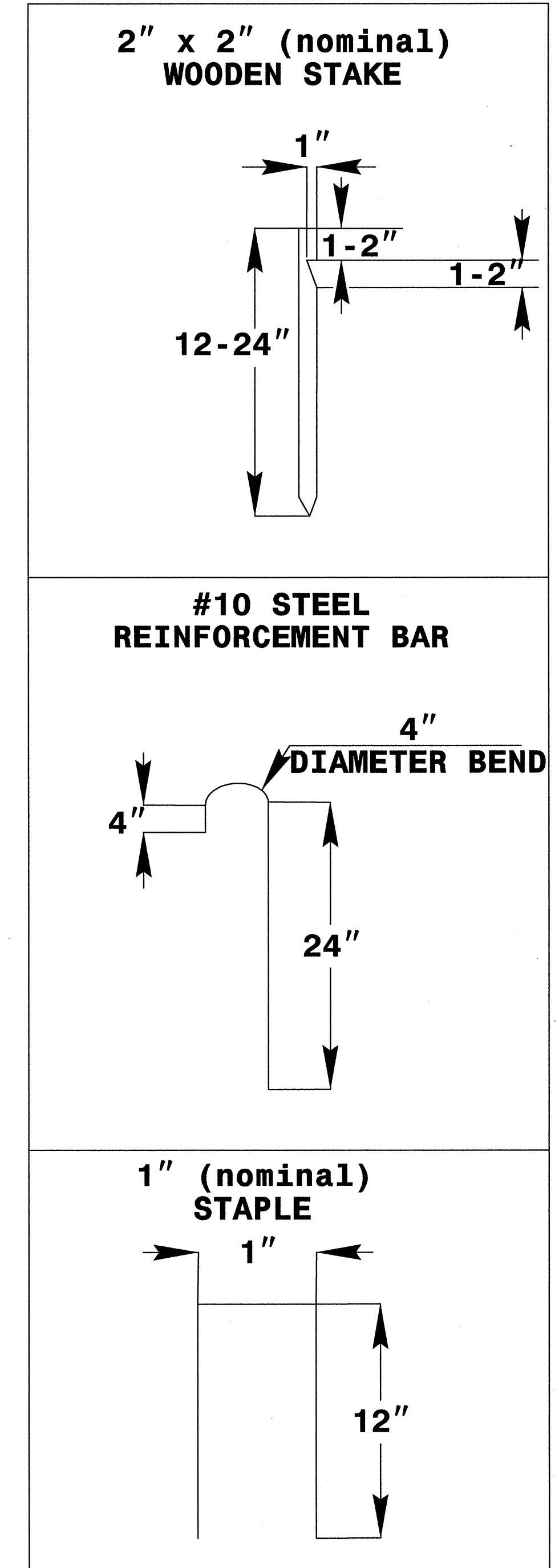
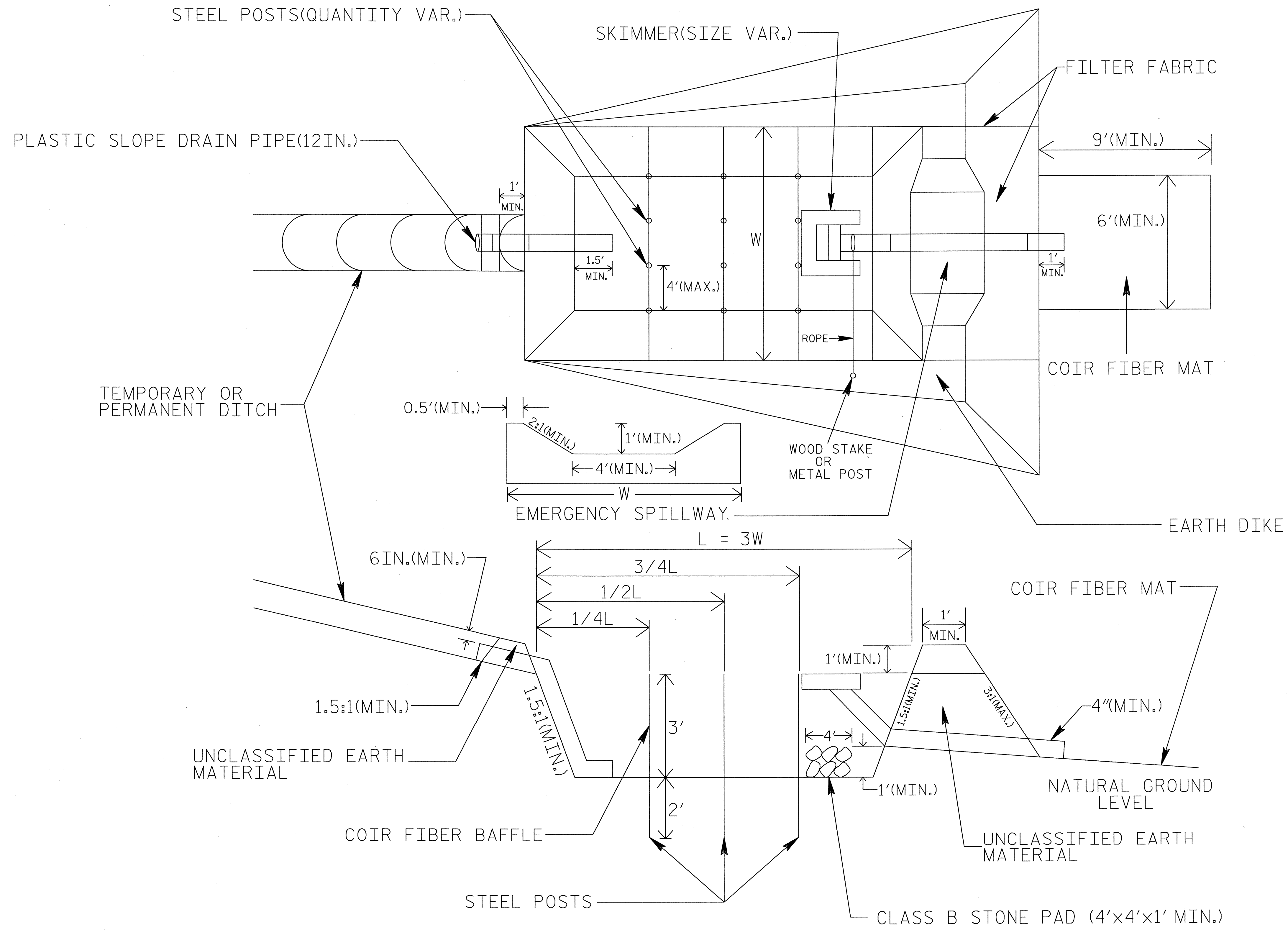


DATE PLOTTED: 05/14/99
 TIME: 11:01 AM
 PLOTTER: HP PLOTTING SYSTEMS
 PLOT SIZE: 36x48 IN
 PLOT SCALE: 1:1
 PLOT ORIENTATION: LANDSCAPE
 PLOTTER MODEL: HP 8500
 PLOTTER SERIAL: 1234567890
 PLOTTER FIRMWARE: 1.23
 PLOTTER DRIVER: HP PLOT 8500
 PLOTTER STATUS: OK
 PLOTTER ERROR: NONE
 PLOTTER MESSAGE: PLOTTING COMPLETE
 PLOTTER JOB NO.: 1234567890
 PLOTTER USER: J. SMITH
 PLOTTER COMPANY: ABC COMPANY
 PLOTTER ADDRESS: 123 MAIN ST
 PLOTTER CITY: ANYTOWN
 PLOTTER STATE: CA
 PLOTTER ZIP: 90210

7/27/2010 3:14:40 PM
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SKIMMER BASIN WITH BAFFLES DETAIL

PROJECT REFERENCE NO. W-5121	SHEET NO. EC-2A
EROSION CONTROL ENGINEER	



COIR FIBER MAT ANCHOR OPTIONS

NOTES

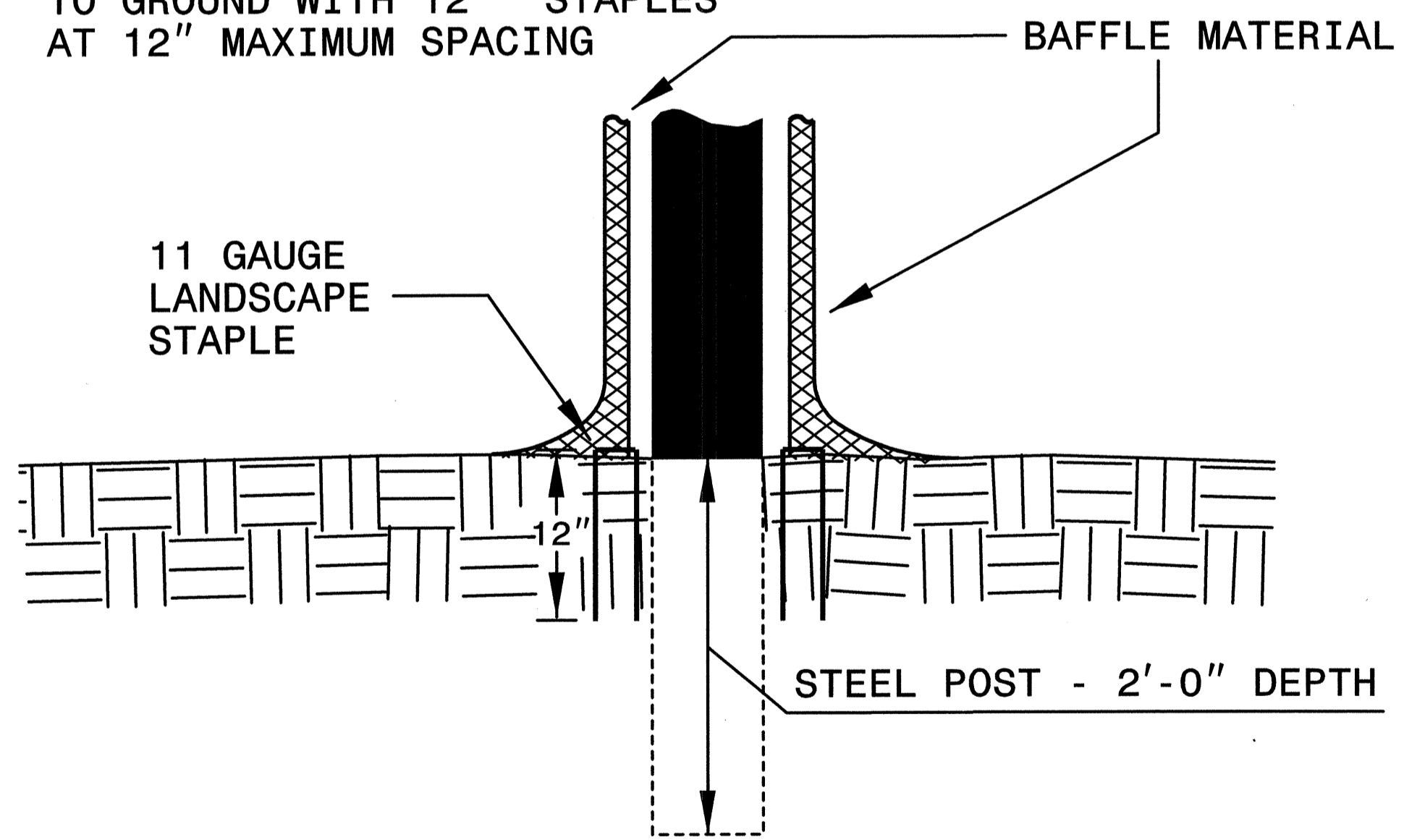
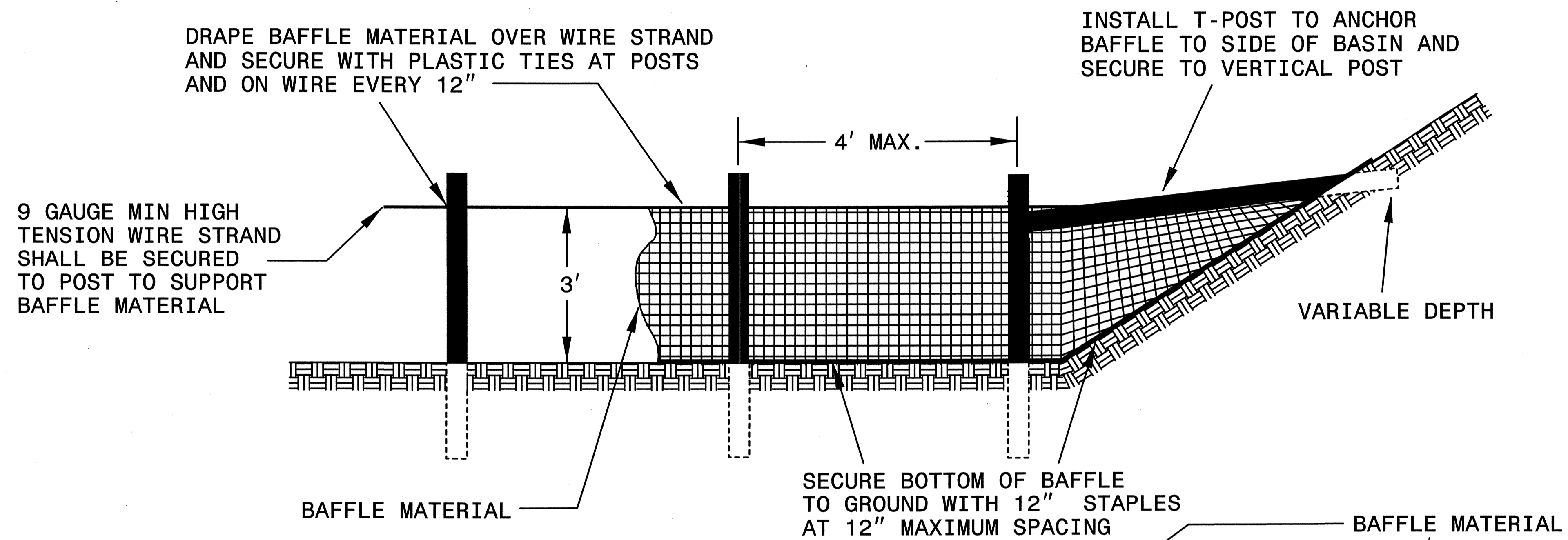
1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
4. DETERMINE EMERGENCY SPILLWAY LENGTH (FT.) USING $Q/0.8$, WHERE Q IS FLOW RATE (CFS) INTO BASIN.

NOT TO SCALE

SYSTEMS DESIGN CONSULTANTS
 7/21/2010 3:14:42 PM

PROJECT REFERENCE NO. <i>W-5121</i>	SHEET NO. <i>EC-2B</i>
EROSION CONTROL ENGINEER	

COIR FIBER BAFFLE DETAIL



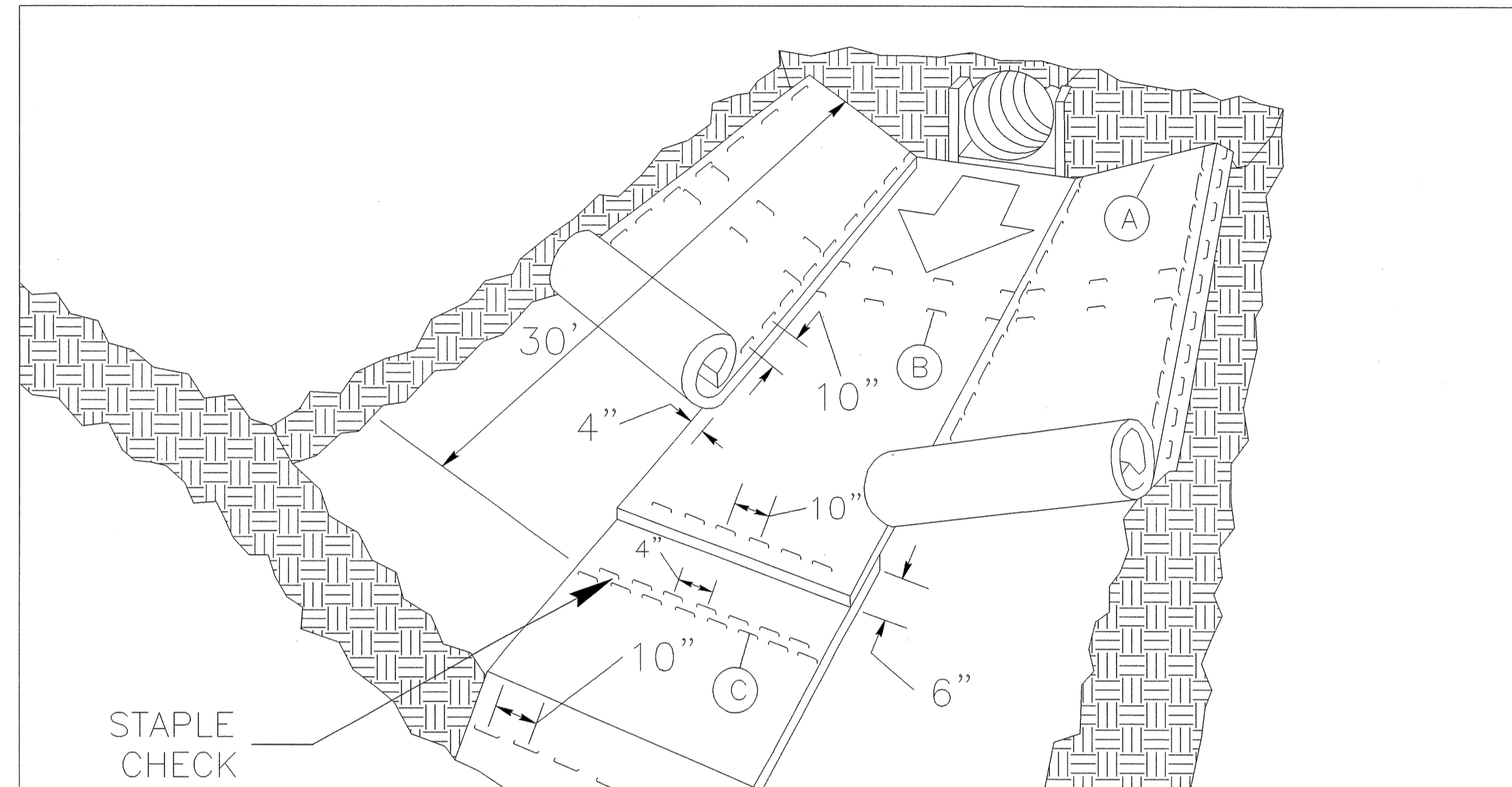
NOTES:

1. INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF $\frac{1}{4}$ THE BASIN LENGTH.
2. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF $\frac{1}{3}$ THE BASIN LENGTH.
3. TOP HEIGHT OF COIR FIBER BAFFLES SHALL NOT BE BELOW BASE OF EMERGENCY SPILLWAY ELEVATION.

BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 12" LANDSCAPE STAPLES

PROJECT REFERENCE NO. W-5121	SHEET NO. EC-2C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATTING INSTALLATION DETAIL



MATTING IN DITCHES

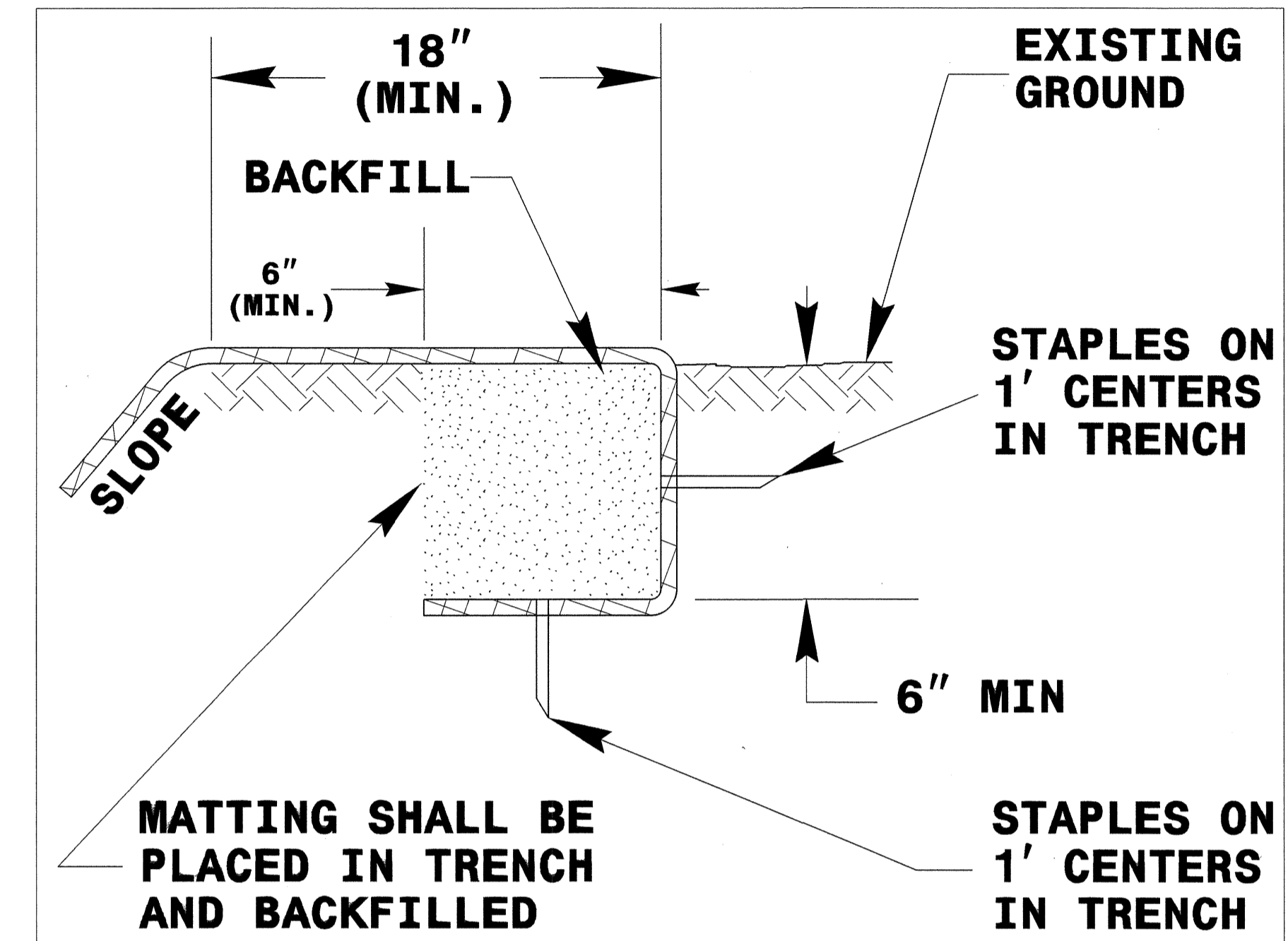
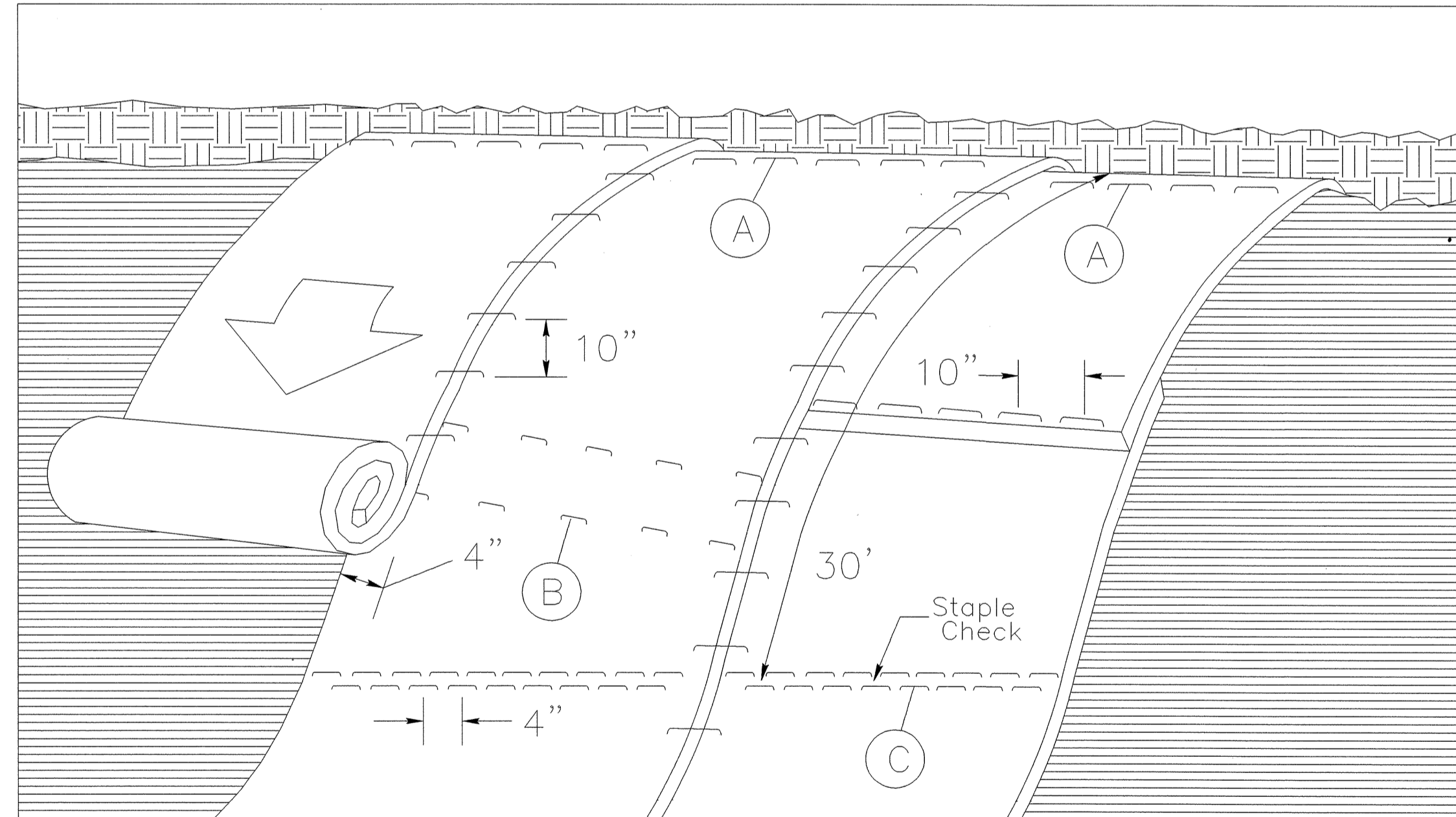


DIAGRAM (A)



MATTING ON SLOPES

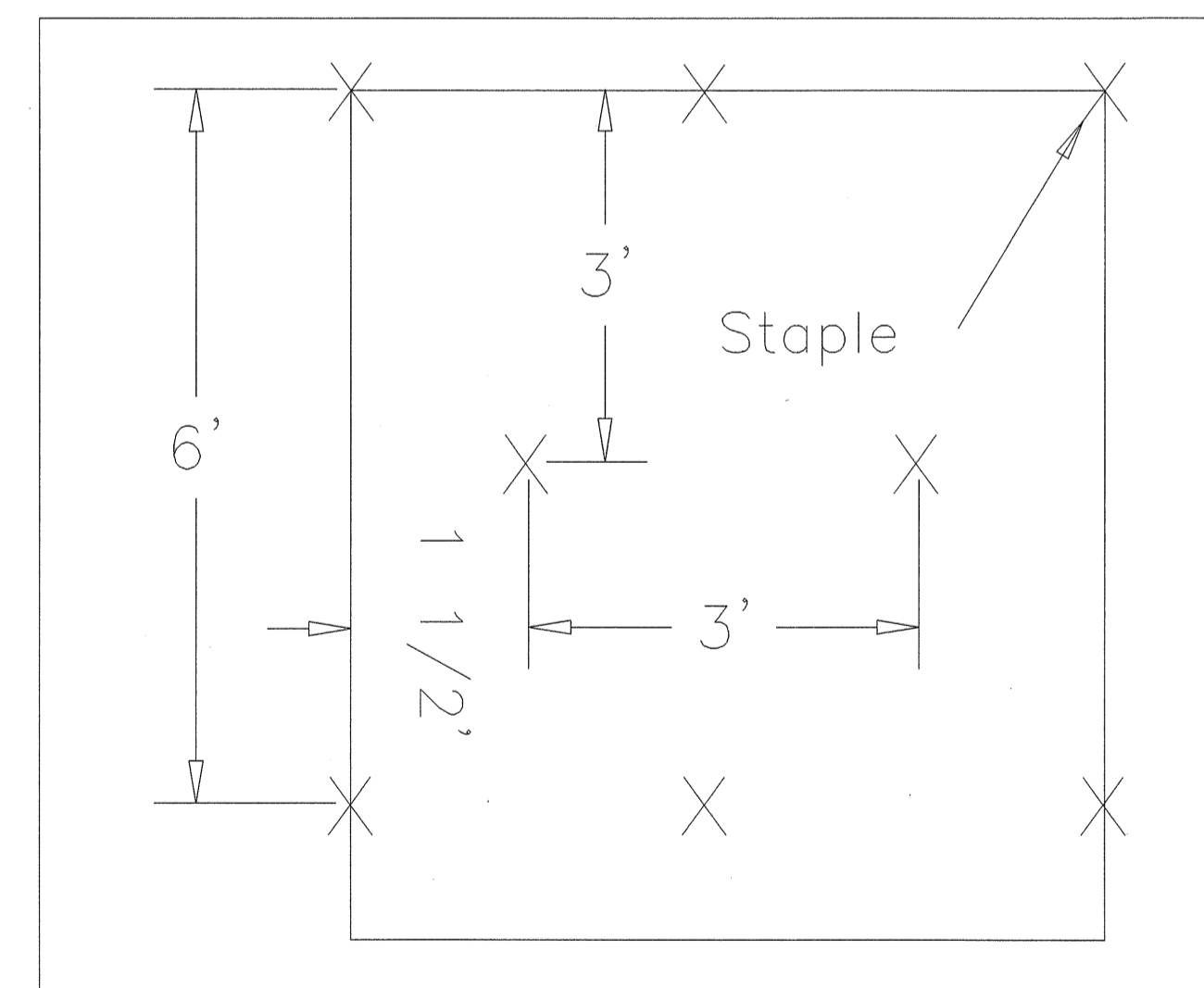


DIAGRAM (B)

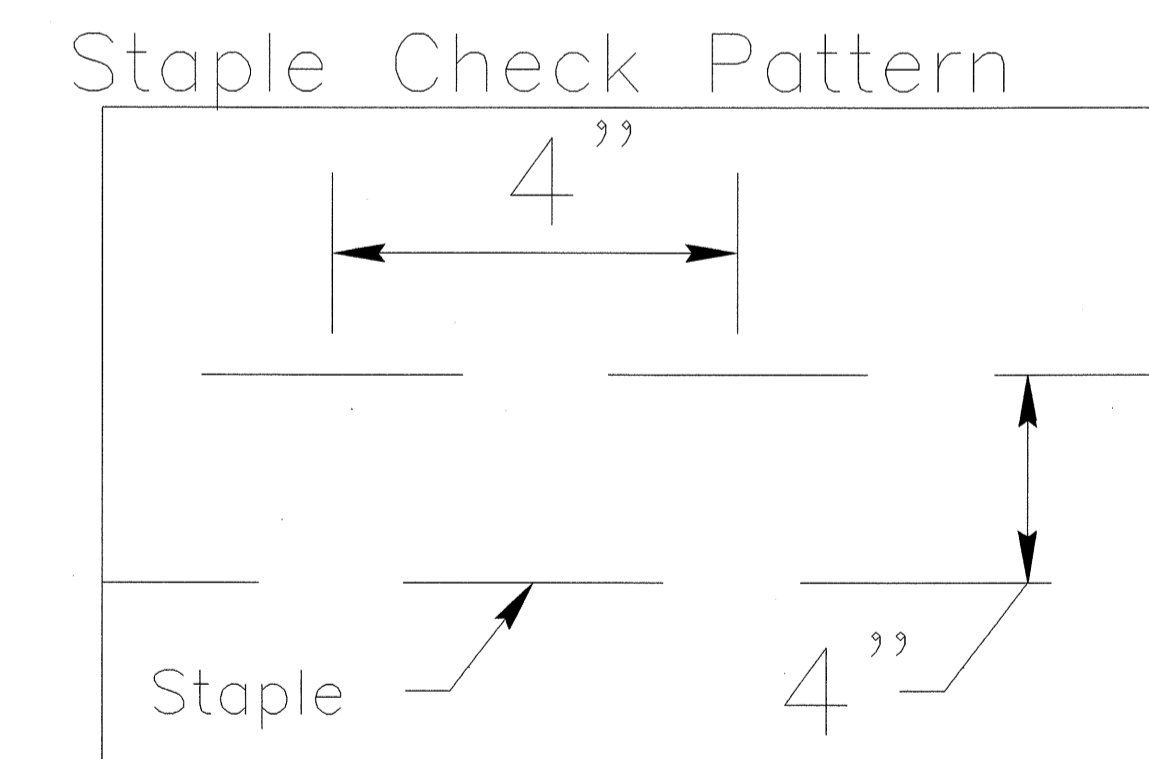


DIAGRAM (C)

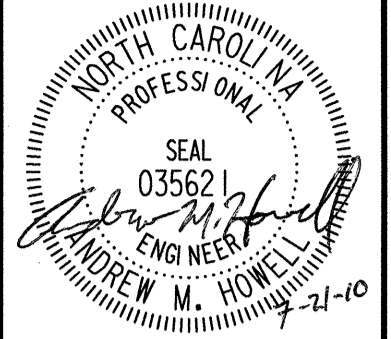

NOTES:

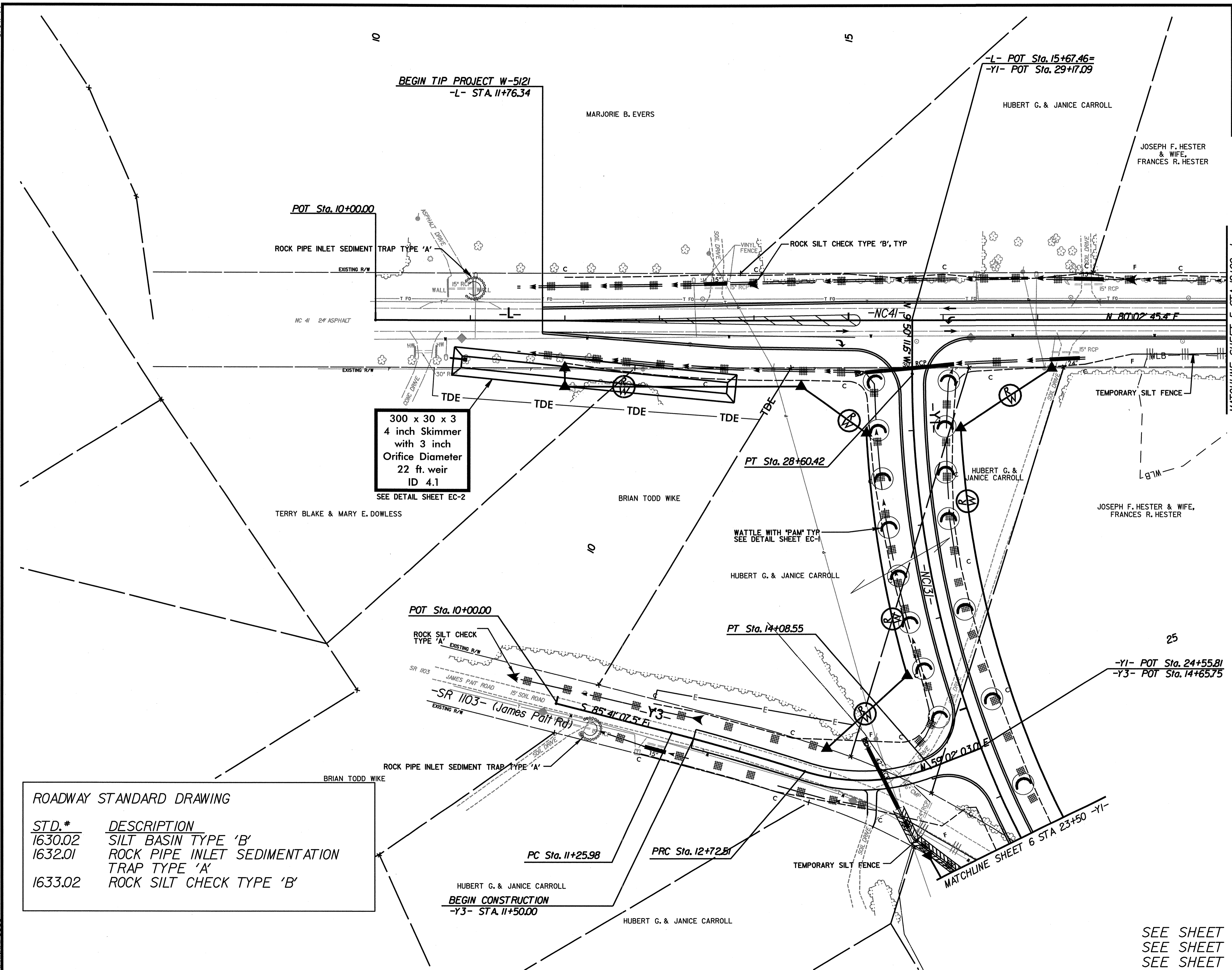
THIS DETAIL APPLIES TO STRAW, EXCELSIOR, AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION.

STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.

NOT TO SCALE

5/14/99

PROJECT REFERENCE NO. W-5121	SHEET NO. EC-3
EROSION CONTROL ENGINEER	
	



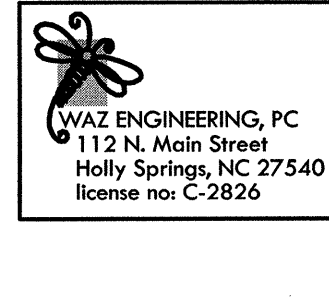
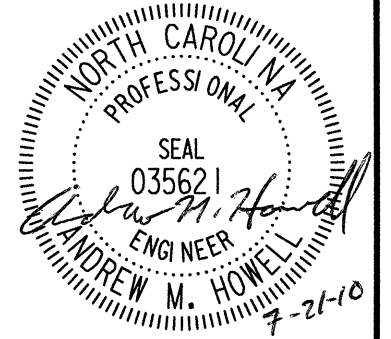
300 x 30 x 3
4 inch Skimmer
with 3 inch
Orifice Diameter
22 ft. weir
ID 4.1
SEE DETAIL SHEET EC-2

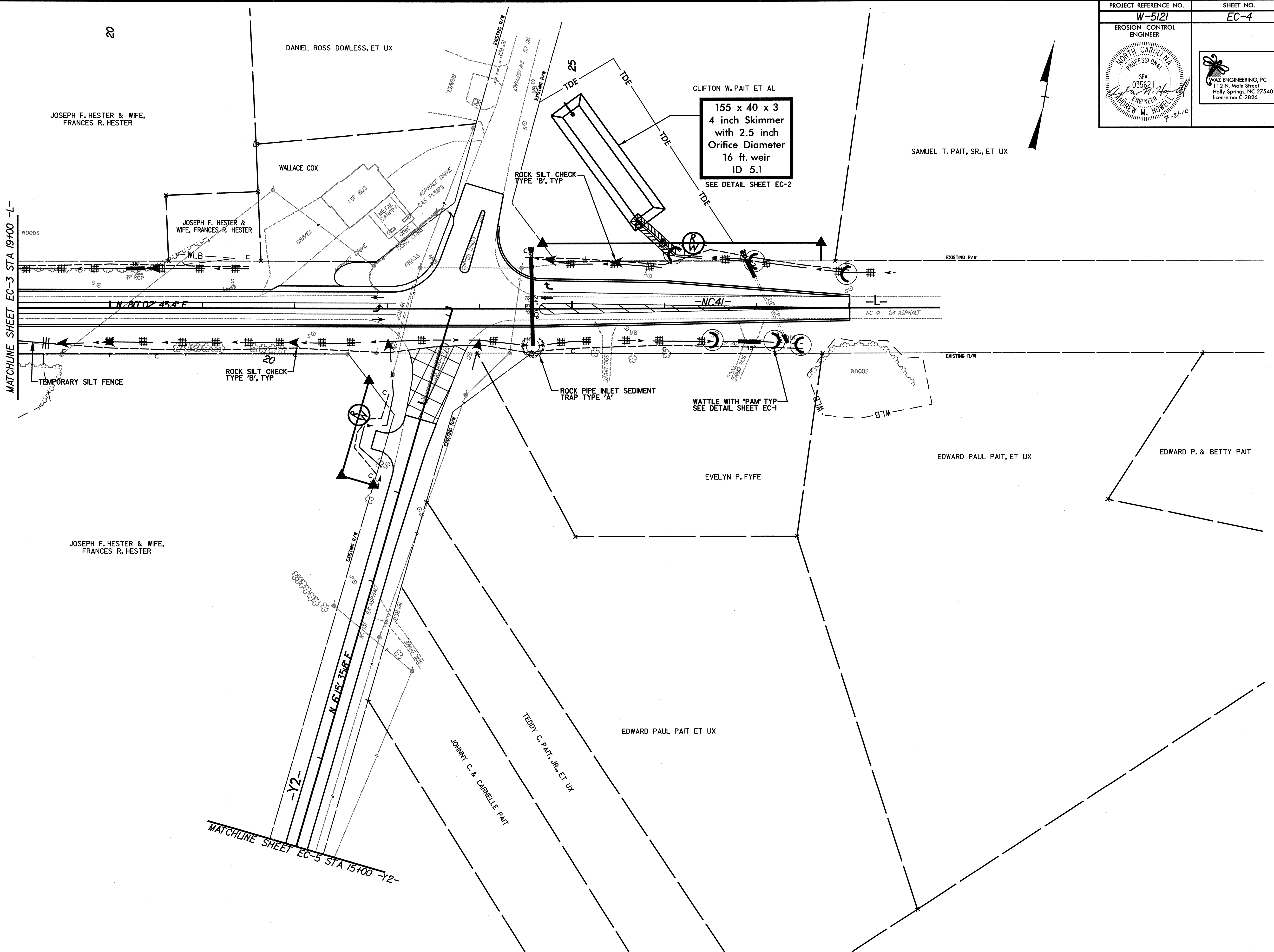
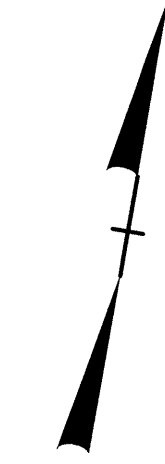
ROADWAY STANDARD DRAWING

STD.#	DESCRIPTION
1630.02	SILT BASIN TYPE 'B'
1632.01	ROCK PIPE INLET SEDIMENTATION TRAP TYPE 'A'
1633.02	ROCK SILT CHECK TYPE 'B'

SEE SHEET 2E FOR DITCH DETAILS.
SEE SHEET 7 FOR -L- PROFILE.
SEE SHEET 8 FOR -Y1- PROFILE.
SEE SHEET 9 FOR -Y3- PROFILE.

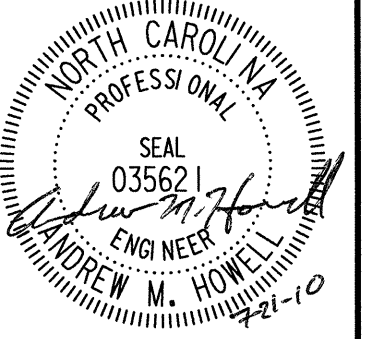
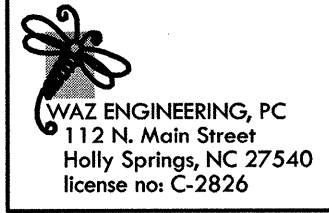
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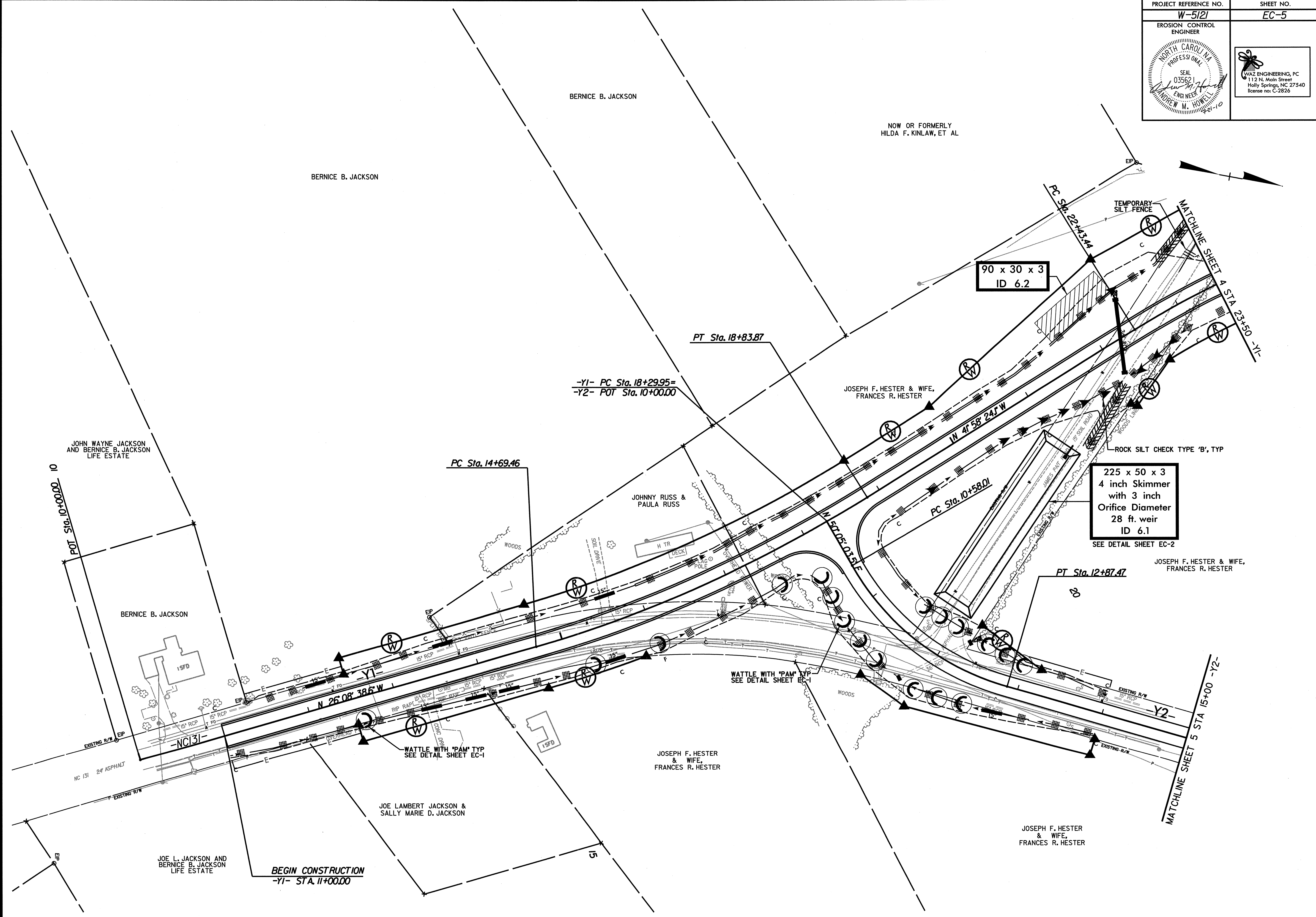
PROJECT REFERENCE NO. W-5121	SHEET NO. EC-4
EROSION CONTROL ENGINEER ANDREW M. HOWELL	 WAZ ENGINEERING, PC 112 N. Main Street Holly Springs, NC 27540 license no: C-2826
	



 SYSTEMS DOWN *****

5/14/99

PROJECT REFERENCE NO. W-5121	SHEET NO. EC-5
EROSION CONTROL ENGINEER	
	



STANDARD CONSTRUCTION

WAZ ENGINEERING, PC 7/27/2010 3:14:37 PM